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Lori Desautels

Butler University, ldesaute@butler.edu

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Meta-Collaboration: Thinking With Another

 www.edutopia.org/blog/meta-collaboration-thinking-with-another-lori-desautels

What if we could dramatically improve our thought processes and learning strategies by tapping into the social genius of another? What if a classmate, colleague, or friend could help us recognize and claim our strengths, new habits of thought, and strategies from a perspective that we never imagined by ourselves? As human beings, our survival depends on others. Our ability to cooperate and collaborate has trumped the stress response state of competition within our species and throughout evolution. With a group affiliation to nurture these relationships, we can strengthen and reappraise our own thought processes.



Ushering in the Conceptual Age



The two aspects of being human that set us apart from other mammals are metacognition and the deep desire to belong or feel felt. Our sense of needing to belong to a group is an inherited part of our neurobiology, and collaboration with others is the desired outcome. Metacognition is our brains' miraculous innate ability to self-assess, think about our thinking, and reshape our perspectives.

Feeling the emotions of others, social acceptance, and cooperation are critical to our early development of the identity and industry stages. Author and motivational speaker Daniel Pink states that [the future belongs to conceptual cooperative thinkers](#). He observes a definitive shift in the developed world from a logical/technical age to a conceptual age, which places a premium on knowledge. Pink believes that these conceptual skills include:

- Design to change the world in significant ways
- Story or narrative skills focused on understanding
- Symphony and synthesis
- Empathy
- Play
- The pursuit of meaning

To empathize and make meaning out of our cooperative experiences using the imagination is our reason for bringing metacognitive collaboration into the classroom. I believe that it begins with teachers and students in a new co-teaching model, as we may need to teach the metacognitive and collaboration skills we desire to see from our students -- we cannot assume that every child knows how to "do" school! We know that the more students understand how they think, process, connect, and remember information, the better their learning. [Recent research](#)

has also reported that working memory skills matter more than IQ and are a better predictor of academic success.

4 Collaborative Metacognition Strategies

When teachers model their own understanding of personalized learning and coping strategies, students pay attention. Listed below are collaborative and metacognitive strategies that lay the foundation for creativity, empathy, and a deep dive into teaching students about their own thinking.

1. Teach students about their own unique neuro-anatomy.

This works best in small groups with a designated student as your co-teacher. When children and adolescents understand the impact of emotions, stress, and memory capacity on their learning, they are empowered with choices that impact everything they do. Four neuroscience terms easily understood and shared can [change the way students think about their thinking](#):

- **Neuroplasticity:** This is the brain's ability to rewire and reshape its neural pathways based upon experiences.
- **Prefrontal cortex:** We find this when we place our hand on our forehead. It is here that we problem solve, emotionally regulate, and learn to pay attention.
- **Amygdala:** The amygdalae are two clusters of neurons deep within the limbic system in each hemisphere of our brains. When these are ignited, we move to a fight/flight/freeze response, and the prefrontal cortex shuts down.
- **Hippocampus:** The hippocampus can be shown with our pointer finger curled down shaped like a seahorse. The hippocampus works beside the amygdala helping our brains memorize and connect learning. Under stress, the hippocampus does not perform well.

Teaching our students what happens in our brains is intrinsically motivating. Knowing how stress distorts thinking is comforting to students. The assigned co-teacher can review what he or she heard, give the teacher feedback and share examples of real life experiences where the stress response was activated.

2. Teach students about how they learn.

Co-teaching is a powerful tool in our classrooms when students and teacher are the co-teaching models. Assign one student per class or week to be the co-teacher. Together, teacher and student develop and share these questions with the class: How do you learn new information? How do you make connections between what you already know and what is being taught? As an example:

We need to read out loud while writing key words down in our notebook or textbook. We also use lots of colors to help address the most important parts that we need to memorize.

One by one, students begin to describe how they approach new material and how they think and feel about it. We decide as a class that we will create a periodic table with learning strategies. We discuss how seeing the different strategies will help us choose one that we might never have considered.

3. Discuss coping with emotional and social problems or challenges.

School is more about the development of a student's social life than anything else. If a child or adolescent is feeling

preoccupied with other relational dilemmas and isn't feeling positive emotion, learning won't take place. The co-teacher's responsibility is sitting beside the teacher and modeling coping strategies when life becomes challenging and feels hopeless. As the lead teacher, I would begin:

For me, I have a good talking to myself in private. 'Lori, take a deep breath and believe this problem has a solution somewhere in your brain.' Let's list all the reasons why this might have happened and what you can begin to do with these options!

The students might laugh a little and talk among themselves for a minute, but once the sharing begins, the feedback and stories become contagious and therapeutic. As a class we gather coping strategies that students share. We post this growing list on a template of the brain hanging on a wall in our classroom. Some examples are:

- Taking a walk
- Spending some time alone
- Talking the problem out with others
- Eating some ice cream or wheat thins
- Moving away from the challenge for a little while

The students understand that this colorful display allows them to choose a strategy that they might never have considered during a heightened emotional moment.

4. Assign "Do Now" tasks.

The purpose of these short assignments is not learning new content but possibly reviewing from the prior day or filling time while attendance and the day's logistics are in progress. Use this morning time for collaboration. As students enter the classroom, give them a baggie of three items and a number. The numbers pair the students. As the partners move to their area, they have seven minutes to design an invention with these three items.

On another day, students will be given a challenging social/emotional problem to solve together. This problem will be relevant to their ages and cultures. After seven minutes, they will need to share a joint solution with the class. Not only will students begin to think about how they approach their thinking, they'll also get an opportunity to intentionally collaborate. You'll see how your students will benefit greatly from shared strategies and options.

Do you teach your students about how their brains work and how they can work together? Has it affected their learning outcomes? Please share in the comments section below.